

Appln No. 10/812,287

Amdt date March 17, 2005

Reply to Office action of November 17, 2004

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1.-30. (Cancelled)

31. (Original) A drill pipe for an oil or gas well comprising:

a generally cylindrical hollow drill pipe having a length; and

a conductive coating connected to the drill pipe to define an electrical pathway that extends along at least a portion of the length of the drill pipe.

32. (Original) The drill pipe of claim 31, wherein the conductive coating is insulated.

33. (Original) The drill pipe of claim 31, wherein the conductive coating is surrounded by insulative coatings.

34. (Original) The drill pipe of claim 31, wherein the conductive coating extends from an upper end of the drill pipe to a lower end of the drill pipe.

35. (Original) The drill pipe of claim 31, wherein the conductive coating extends along the length of the drill pipe.

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36. (Original) The drill pipe of claim 31, further comprising a second conductive coating connected to the drill pipe to define a second electrical pathway that extends along at least a portion of the length of the drill pipe.

37. (Original) The drill pipe of claim 36, wherein the second conductive coating is applied over said conductive coating.

38. (Original) The drill pipe of claim 37, wherein the second conductive coating is insulated from said conductive coating.

39. (Original) The drill pipe of claim 31, further comprising a plurality of conductive coatings connected to the drill pipe to define a plurality of electrical pathways that each extend along at least a portion of the length of the drill pipe.

40. (Original) The drill pipe of claim 39, wherein each successive conductive coating in the plurality of conductive coatings is applied over an adjacent one of the plurality of conductive coatings.

41. (Original) The drill pipe of claim 40, wherein each conductive coating in the plurality of conductive coatings is insulated from said adjacent one of the plurality of conductive coatings.

42. (Original) A method of communicating to downhole oil or gas well equipment comprising:

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providing a generally cylindrical hollow drill pipe having a length; and

applying a conductive coating on the drill pipe to define an electrical pathway that extends along at least a portion of the length of the drill pipe.

43. (Currently Amended) The method of claim 42—32, further comprising insulating the conductive coating.

44. (Currently Amended) The method of claim 42—32, further comprising surrounding the conductive coating with insulative coatings.

45. (Currently Amended) The method of claim 42—32, wherein the conductive coating extends from an upper end of the drill pipe to a lower end of the drill pipe.

46. (Currently Amended) The method of claim 42—32, wherein the conductive coating extends along the length of the drill pipe.

47. (Currently Amended) The method of claim 42—32, further comprising applying a second conductive coating on the drill pipe to define a second electrical pathway that extends along at least a portion of the length of the drill pipe.

48. (Original) The method of claim 47, wherein the second conductive coating is applied over said conductive coating.

49. (Original) The method of claim 48, further comprising insulating the second conductive coating from said conductive coating.

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50. (Currently Amended) The method of claim 42—32, further comprising applying a plurality of conductive coatings on the drill pipe to define a plurality of electrical pathways that each extend along at least a portion of the length of the drill pipe.

51. (Original) The method of claim 50, wherein each successive conductive coating in the plurality of conductive coatings is applied over an adjacent one of the plurality of conductive coatings.

52. (Original) The method of claim 51, wherein each conductive coating in the plurality of conductive coatings is insulated from said adjacent one of the plurality of conductive coatings.

53. (New) The drill pipe of claim 31, wherein the conductive coating is connected to an inner diameter of the drill pipe.

54. (New) The drill pipe of claim 53, wherein an insulative coating is connected to the inner diameter of the drill pipe between the inner diameter of drill pipe and the conductive coating, and wherein the insulative coating and the conductive coating each extend substantially along the length of the drill pipe.

55. (New) The method of claim 45, further comprising applying an insulative coating to an inner diameter of the drill pipe and applying the conductive coating to the insulative coating such the insulative coating is disposed between the inner diameter of the drill pipe and the conductive coating, and

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wherein the insulative coating and the conductive coating each extend substantially along the length of the drill pipe.